

NX-3220/3320/3420

MULTI-PROTOCOL DIGITAL & ANALOG PORTABLE RADIOS

This versatile handheld radio supports both NXDN® and DMR digital protocols as well as mixed digital & FM analog operation, enabling it to serve with distinction in a wide range of enterprise and operation critical applications. Compact yet designed with durability in mind, it's packed with convenient features like Bluetooth® for hands-free operation and built-in GPS. Three different models are available: Full Keypad model with LCD, Standard Keypad model with LCD and a large 4-way D-pad, and the Basic Model without LCD or keypad. Additionally, for expansion capability a software license certification system facilitates extensive customization.

Features

- Multi-protocol digital radio: Designed to operate under NXDN® or DMR digital, and FM analog protocols
- NXDN® Conventional and Type-C & Gen2 Trunking
- DMR Tier 2 Conventional & Site Roaming
- DMR Auto Slot Select
- DMR Tier 3 Trunking
- Mixed Digital & FM Analog Operation allows gradual migration at your own pace
- 4-Line Basic Frame (2-Line Main/Sub-LCD, icon & key guide) / 14 Characters
- 5-Line Text Message Frame (3 Lines of Text, icon & key guide)
- 7-color Light Bar Indicator on the top panel. Individual color can be set for each channel
- 4-way Directional-pad (D-pad) for intuitive control and operation
- Built-In GPS Receiver/Antenna for effective fleet and incident management
- Built-in Bluetooth® for hands-free operation for IoT applications- Applicable Bluetooth profiles: HSP (Headset Profile) and SPP (Serial Port Profile)
- Renowned KENWOOD Audio Quality achieved with Active Noise Reduction (ANR) that utilizes built-in DSP
- Optional DES and AES Encryption
- Built-in Motion Sensor (Man-down, Stationary and Motion Detection)
- IP54/55/67 and MIL-STD-810 C/D/E/F/G
- 1 Watt Audio Output Power
- UHF: 120 MHz capability
- Available models: Full Keypad (w/ LCD and full keypad), Standard Keypad (w/ LCD and 4-way large D-pad/4 key), and Basic (w/o LCD and keypad)
- 260 CH/128 Zones (64 CH/4 Zones for Basic model)
- Maximum of 1,000 CH/Radio with option
- Intrinsically Safe Option
- Paging Call
- Emergency Call
- Status/Text Message
- Remote Stun/Kill/Check

NXDN® **DMR** **Gen2** **Bluetooth®** **GPS** **FleetSync®**

DMR T3S **DMR Auto Slot Select**



Full Keypad Model Standard & Basic Models

2-pin Connector.

Digital – NXDN® Mode

NXDN Conventional	Remote Monitor
NXDN Type-C & Gen2 Trunking	All Group Call
6.25 & 12.5 kHz Channels	Over-the-Air Alias (OAA)
Advanced GPS	Over-the-Air Programming (OTAP)

Digital – DMR Mode

Two-slot TDMA in 12.5 kHz channels	Call Interruption
DMR Tier 2 Conventional / Site Roaming	Dual-slot Direct Mode
DMR Auto Slot Select	ARC4 Encryption
S-Trunking (Ver. UP) DMR Tier 3 Trunking	Energy Efficient

Analog – FM Mode

Conventional & LTR Trunking	MDC-1200: PTT ID ANI / Caller ID
FleetSync/II: PTT ID ANI / Caller ID Display,	Display, Emergency, Radio Check /Inhibit
Selective Group Call, Emergency Status	QT / DQT, DTMF, 2-Tone
Text Messages	Built-in Voice Inversion Scrambler



Multi-Protocol

Unsurpassed interoperability for Enterprise radio users with the freedom to migrate at your own pace.



Gen2

Scalable server-based system architecture for management of NEXEDGE wide area digital communications systems.



Klarity

The ultimate level of sound clarity technology combining Optimization, advanced Sound Analysis and Active Noise Reduction.

Accessories

All accessories may not be available in all markets.
Contact an authorized Kenwood dealer for details and complete list of all accessories.

KNB-55L/57L/78L

Li-ion Battery Pack
(7.4V/1480mAh,
7.4V/2000mAh,
7.4V/2860mAh)

KNB-56N

Ni-MH Battery Pack
(7.2 V/1400 mAh)

KNB-79LCM

Li-ion Battery Pack
(7.4 V/2860 mAh,
Intrinsically Safe)

KBP-5

Battery Case (6 AA)

KSC-25LSK/25SK

Rapid Charger
(Li-ion Only/Tri-Chem)

KSC-256AK

Multiple Charger
(6-pocket)

KMB-30A

Mounting Bracket
(for KSC-256AK)

KVC-23

Vehicular Charger

KRA-22/23

VHF/UHF Low Profile
Helical Antenna

KRA-25

High Gain
Whip Antenna

KRA-26/ 27

VHF Helical Antenna
UHF Whip Antenna

KRA-28

Broadband VHF
Whip Antenna

KRA-41/42

VHF/UHF Stubby Antenna

KRA-24

800MHz Whip Antenna

KRA-32K

700/800MHz Whip Antenna

KRA-36

700/800MHz Stubby Antenna

KRA-38K

800/900MHz Whip Antenna
(including NX-3400/NX-3420)

KRA-39

900MHz Stubby Antenna

KEP-2

Earphone Kit for
KMC-45D (2.5mm plug)

KMC-45D

Speaker Microphone
(IP54/55 & TDMA)

KHS-7

Headset (Single Muff
Single Muff & In-line PTT /
Heavy Duty Behind-the Head)

KHS-7A

Lightweight Single
Muff Headset
or KMC-54WD

KHS-8BL

2-wire Palm Mic
with Earphone (Black)

KHS-9BL

3-wire Lapel Mic
with Earphone (Black)

KHS-10D

Headset (Single Muff
Single Muff & In-line
PTT Heavy Duty
Behind-the-Head)

KHS-22A

Head Set

KHS-26

Head Set
(with Ear Bud In-Line PTT/
with D-RING IN-LINE PTT)

KHS-27A

Head Set
(with D-Ring
In-Line PTT)

KHS-31C

Head Set
(with C-Ring)

KBH-11

Belt Clip (2.5")

KAS-20

AVL & Dispatch Software

KPG-180AP

OTAP Manager

KLH-206/207

Leather/Nylon Case

Specifications

General	NX-3220	NX-3320	NX-3420
Frequency Range	136-174 MHz	400-520 MHz	TX/RX: 851-870, 935-941 MHz TX: 806-825, 896-902 MHz
Max. Channels Per Radio		Up to 1000 CH with option	
Number of Channels		260 (64 for no LCD models)	
Number of Zones		128 (4 for no LCD models)	
Channel Spacing			
Analog	12.5/15/25/30* kHz	12.5/25* kHz	12.5/25* kHz
Digital	6.25 kHz/12.5 kHz	6.25 kHz/12.5 kHz	6.25 kHz/12.5 kHz
Power Supply		7.5V DC ± 20%	
Battery Life 5-5-90	(FDMA conventional / Trunking, TDMA Conventional / Trunking)		
KNB-55L (1480 mAh)	8.5 / 6.5 hours, 12.5 / 9 hours	9 / 7 hours, 12 / 9 hours	
KNB-56N (1400 mAh)	7.5 / 6 hours, 11 / 8 hours	8 / 6 hours, 10.5 / 8 hours	
KNB-57L (2,000 mAh)	12 / 9.5 hours, 17.5 / 13 hours	13 / 10 hours, 17 / 13 hours	
KNB-78L (2,860 mAh)	17.5 / 13.5 hours, 25 / 18.5 hours	18.5 / 14 hours, 24 / 18.5 hours	
KNB-79LCM (2,860 mAh)	15 / 11.5 hours, 21.5 / 16 hours	15.5 / 12 hours, 20.5 / 16 hours	
Operating Temperature		-22°F to +140°F (-30°C to +60°C)	
Frequency Stability		±0.5 ppm (-30°C to +60°C; +25°C Ref.)	
Dimensions		(W x H x D) Projections Not Included	
Radio Only		2.20 x 4.71 x 1.43 in (56 x 119.6 x 36.4 mm)	
KNB-55L (1480 mAh)		2.20 x 4.71 x 1.43 in (56 x 119.6 x 36.4 mm)	
KNB-56N (1400 mAh)		2.20 x 4.71 x 1.68 in (56 x 119.6 x 42.7 mm)	
KNB-57L (2,000 mAh)		2.20 x 4.71 x 1.53 in (56 x 119.6 x 39 mm)	
KNB-78L, KNB-79LCM		2.20 x 4.71 x 1.77 in (56 x 119.6 x 44.9 mm)	
Weight Radio Only		7.8 oz (220 g)	
KNB-55L (1480 mAh)		11.1 oz (315 g)	
KNB-56N (1400 mAh)		14.5 oz (410 g)	
KNB-57L (2,000 mAh)		12.0 oz (340 g)	
KNB-78L, KNB-79LCM		13.6 oz (385 g) / 13.9 oz (395 g)	
FCC ID	K44479000	K44479100	K44502500
IC Certification	282F-479000	282F-479100	282F-502500

*25 and 30 kHz in VHF/UHF Bands (except T-Band) are not included in the models sold in the USA or US territories.

**800MHz band only

Analog measurements made per TIA603. Specifications are measured according to applicable standards.

Battery Life is measured by Battery Save ON, GPS/Bluetooth OFF, 4 W for VHF/UHF and 3 W for 800/900MHz Bands

Specifications are subject change without notice, due to advancements in technology.

Receiver	NX-3220	NX-3320	NX-3420
Sensitivity			
NXDN® 6.25 kHz Digital (3% BER)		0.20 µV	
NXDN® 12.5 kHz Digital (3% BER)		0.25 µV	
DMR 12.5 KHz Digital (5% BER)		0.30 µV	
DMR 12.5 KHz Digital (1% BER)		0.45 µV	
Analog (12dB SINAD)		0.25 µV	
Selectivity			
Analog @ 12.5kHz		65 dB	60 dB
Analog @ 25kHz		72 dB	70 dB
Intermodulation		70 dB	
Spurious Rejection		70 dB	
Audio Distortion		3%	
Audio Output Power		500 mW/8Q (3% Distortion) / 1,000 mW/8Q (5% Distortion)	
Transmitter	NX-3220	NX-3320	NX-3420
RF Power Output (High / Mid / Low)	5 W / 4 W / 1 W		3 W / 1 W
Spurious Emission		-70 dB	
FM Hum & Noise			
Analog @ 12.5kHz		40 dB	
Analog @ 25kHz		45 dB	
Audio Distortion		Less than 3%	
Digital Protocol		ETSI TS 102 361-1, -2, -3, -4	
Emission Designator		16K0F3E*, 14K0F3E**, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 7K60FXD, 7K60FXE, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	

The Bluetooth word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc.

NXDN® is a registered trademark of JVCケンウッド Corporation and Icom Inc.

NEXEDGE® & FleetSync® are a registered trademarks of JVCケンウッド Corporation.

All other trademarks are the property of their respective holders.

MIL-STD & IP

MIL Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures	MIL 810G Methods/Procedures
Low Pressure	5001/Procedure I	5002/Procedure I, II	5003/Procedure I, II	5004/Procedure I, II	5005/Procedure I, II
High Temperature	5011/Procedure I, II	5012/Procedure I, II	5013/Procedure I, II	5014/Procedure I, II	5015/Procedure I, II
Low Temperature	5021/Procedure I	5022/Procedure I, II	5023/Procedure I, II	5024/Procedure I, II	5025/Procedure I, II
Temperature Shock	5031/Procedure I	5032/Procedure I	5033/Procedure I	5034/Procedure I, II	5035/Procedure I
Solar Radiation	5051/Procedure I	5052/Procedure I	5053/Procedure I	5054/Procedure I	5055/Procedure I
Rain	5061/Procedure I, II	5062/Procedure I, II	5063/Procedure I, II	5064/Procedure I, III	5065/Procedure I, III
Humidity	5071/Procedure I, II	5072/Procedure II, III	5073/Procedure II, III	5074	5075/Procedure II
Salt Fog	5091/Procedure I	5092/Procedure I	5093/Procedure I	5094	5095
Dust	5101/Procedure I	5102/Procedure I	5103/Procedure I	5104/Procedure I, III	5105/Procedure I
Vibration	5142/Procedure VIII, X	5143/Procedure I	5144/Procedure I	5145/Procedure I	5146/Procedure I
Shock	5162/Procedure I, II, V	5163/Procedure I, IV	5164/Procedure I, IV	5165/Procedure I, IV	5166/Procedure I, IV
International Protection Standard					
Dust & Water Protection*	IP54/55/57				* Audio accessory or cover must be installed.

JVCケンWOOD USA Corporation

Communications Sector Headquarters
1440 Corporate Drive | Irving, TX 75038

Order Administration/Distribution

P.O. BOX 22745, 2201 East Dominguez St., Long Beach, CA 90801-5745

www.kenwood.com/usa

JVCケンWOOD Canada Inc.

Canadian Headquarters and Distribution
6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8

www.kenwood.com/ca

JVCケンWOOD Communications
Global Website



comms.kenwood.com



ISO9001 Registered
Communications Systems Business Unit
JVCケンWOOD Corporation

ADS#17919 Print in U.S.A.